DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023471 Address: 333 Burma Road **Date Inspected:** 08-May-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Liu Hua Jie **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD

WELDING:

Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 067609 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3013-006; located On Orthotropic Box Girder (OBG); ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Repair Report (WRR) was B-WR20828. ZPMC Quality Control (QC) Mr. Zhang Lin was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 1G (1F) FCM-Repair-1. See attached photo for further details.

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Segment 13AE

This QA Inspector observed ZPMC qualified welding personnel identified as 067609 perform Shielded Metal Arc Welding (SMAW), Bevel location Base Metal Repair; located On Orthotropic Box Girder (OBG); ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Critical Welding Repair Report (CWRR) was B-CWR20828. ZPMC Quality Control (QC) Mr. Wang Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 2G (2F) FCM-Repair-1. See attached photo for further details.

Segment 13BW

This QA Inspector observed ZPMC qualified welding personnel identified as 045196 perform Shielded Metal Arc Welding (SMAW), weld joint identified as DP3128-001-030; located On Orthotropic Box Girder (OBG); ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Repair Report (WRR) was B-WR20905. ZPMC Quality Control (QC) Mr. Sun Tian Liang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 1G (1F) FCM-Repair-1

Segment 13AE ~ 13BE

This QA Inspector observed ZPMC qualified welding personnel identified as 200113 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3007AC-004; located On Orthotropic Box Girder (OBG); ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Wang Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-B-U2-FCM-1.

Segment 13AE ~ 13BE

This QA Inspector observed ZPMC qualified welding personnel identified as 200113 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3009A-008; located On Orthotropic Box Girder (OBG); ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Wang Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-B-U2-FCM-1.

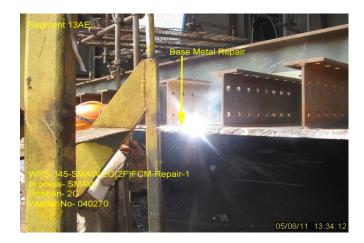
Segment 13CW

This QA Inspector observed ZPMC qualified welding personnel identified as 045196 perform Shielded Metal Arc Welding (SMAW), weld joint identified as AH3003-001; located On Orthotropic Box Girder (OBG); ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Repair Report (WRR) was B-WR20881. ZPMC Quality Control (QC) Mr. Zhang Lin was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 2G (2F) FCM-Repair-1

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.

WELDING INSPECTION REPORT

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Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey - 15000026784, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhune, Manoj	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer